Reply Comments In the Matter of

Lifeline and Link Up Reform and Modernization WC Docket No. 11-42

Lifeline and Link Up WC Docket No. 03-109

Federal-State Joint Board on Universal Service CC Docket No. 96-45

Advancing Broadband Availability Through Digital Literacy Training WC Docket No. 12-23

The undersigned are individuals interested in and committed to the adoption and use of broadband technologies by people with disabilities. We specifically aim our comments at Paragraph 6 of the FNPRM: "To support broadband adoption, the FNPRM seeks comment on dedicating a certain amount of USF funding for four years to support formal digital literacy training for consumers at libraries and schools across the United States...."

We are submitting these Reply Comments largely in support of comments by the American Library Association, Connected Nation, Benton Foundation, and others regarding the need for consumer training in digital literacy. Digital literacy training is essential in order to reach late adopting consumers, and libraries and other community anchor institutions (CAIs) should serve as the experienced gateways to reach these consumers and bring them into the broadband equation as full participants.

We agree with the American Library Association's Comment that there is a need to "target audiences, such as non-English speaking populations, elderly and people with disabilities." Similarly, we recognize and support that "[t]he ALA Office for Literacy and Outreach Services ... shares effective practices and resources for serving specific populations, including older adults, people with disabilities, adult learners, non-English speakers and tribal communities." We supplement these statements with insights into the particular experience of people with disabilities that lead to specific recommendations for how the Commission should structure its proposed digital literacy training program.

It is already known that people with disabilities have among the lowest rates of adoption and use of computer and Internet technologies. Recent studies show a gap between disabled and

non-disabled citizens of 23% to 30%^{1 2 3}. People with disabilities also have often low incomes, making their home adoption of broadband less likely and less sustainable. Although limited geographical availability and cost are important issues across the board, we believe that other factors already identified by the Commission are greater barriers: **relevance and digital literacy**. Our comments below elaborate on how these 2 factors apply to disabled communities.

Broadband Relevance to Consumers With Disabilities Should Be Communicated More Effectively

Although advanced consumers with disabilities have been enthusiastic and early adopters, too many people with disabilities do not see themselves in the broadband picture at all. Whatever the 'demand-side' reasons are for this – and these are interesting and certainly worthy of study, as we will recommend later -- the 'supply side' failure here on behalf of advocates, industry, and government programs is two-fold. First, most mainstream outreach and marketing programs do not actively and explicitly include consumers with disabilities in their materials, strategies, or communication plans. Second, few consistent or coordinated attempts have been made to identify all the specific points of relevance of broadband for people with disabilities, or to disseminate those through disability-specific communication programs.

In fact, broadband has positive implications for potential users in all disability categories. Some of these are mainstream advantages with magnified value for people with disabilities:

- News and information.
- Culture, entertainment, and hobbies.
- Education and staying sharp: distance learning, puzzles/games.
- Financial advantages: online shopping, employment, other income, home energy.
- Safety and security: integration with alarm services, emergency notification, alerts, and 911. These are key determinants to allowing people to live at home longer.
- Health care: reduced travel, increased frequency of monitoring; monitored exercise programs; prescription delivery.
- Staying in touch with family, friends, and other social networks, reducing the incidence and severity of depression and social isolation.

¹ "Americans living with disability and their technology profile"

http://pewinternet.org/Reports/2011/Disability.aspx
Pew Research Center's Internet & American Life Project, January 2011

² "Exploring the Digital Nation: Home Broadband Internet Adoption in the United States" Economics and Statistics Administration and National Telecommunications and Information Administration in the U.S. Department of Commerce, November 2010.

³ "Broadband Adoption and Use in America", Federal Communications Commission, 2010.

• Government services: convenient access to licenses, taxes, and remote participation in governmental meetings and activities.

Some advantages are **specifically disability related**:

- Reduced need for travel for those persons for whom travel is difficult, expensive, or impossible.
- Sign language and speech-reading capable videoconferencing and Video Relay Service.
- Accessible and integrated text, voice, and text-to-voice or voice-to-text services.
- Captioned and described media and events.
- Accessible multimedia educational materials and experiences.
- Wideband audio ("HD Audio") for people who are hard of hearing.

Given this wide range of advantages, it is a social imperative to take this message to the large, currently unconnected audiences that would benefit. Digital literacy programs should include a focused component that communicates how relevant broadband can be for consumers with disabilities, and should use existing successful channels for reaching out to these consumers.

Digital Literacy Training Should Occur in Libraries and Other Community Anchor Institutions

We support libraries and other CAIs as the best home for digital literacy training for several reasons. First, these institutions are already known as good service points for people with disabilities. In fact, the specialized libraries for people with disabilities, found in different locations and under different administrative units, are in some cases the only local organizations with a mandate to serve disabled people across all categories and purposes. Second, we know that late adopters explore broadband via libraries and other CAIs. Third, we know that some people with disabilities who are low income are not likely to adopt broadband at home due to reasons of cost alone. If libraries and CAIs are staffed and equipped to serve these patrons for the long term, shared use in libraries and other public access points finesses the otherwise insurmountable cost issue.

Digital Literacy Training Is Required For Both Consumers and Trainers

Many people with disabilities have had unsuccessful experiences with technology, leading to a form of pessimism about future encounters. In some cases these consumers know there are solutions out there such as screen magnifiers, alternate input devices, and enhanced audio, but they do not know how to get them or do not have the confidence necessary to implement them. Ironically, many of these solutions are already contained within the products and services

that make up the broadband Internet ecosystem, but users lack the wherewithal to successfully utilize them. In other cases the potential user only thinks an accommodation is needed, and this mistaken perception suppresses demand. Digital literacy programs should include sufficient targeted information about accessible and assistive technologies, and an adequate method of identifying resources for their acquisition and successful use so that end users can understand and take advantage of them. The programs and all their materials should be maximally accessible themselves.

Similarly, digital literacy trainers need access to usable information about assistive technologies, and training in how to include people with disabilities in the training programs, if they are going to be able to serve consumers with disabilities. They too are cut off from these sources of information, and also lack confidence that is built upon successful experience. It is not feasible that every digital literacy training program have an accessibility specialist who can serve all consumers regardless of their needs and preferences – such experts are already too scarce. However, training programs should train all trainers on the basics of accessible broadband, and the Commission should support an efficient method of providing access to national resources about accessible and assistive technologies, possibly based on an expanded vision of its Clearinghouse, and should support local trainers in solving specific access problems without the need for dedicated local resources. In order to permit consumers to explore accessible broadband, the Commission should ensure that training sites have sufficient access to a representative but cost-efficient array of additional equipment and software, are accessible locations, and that all training is delivered in a maximally accessible manner. To be clear, the goal of this element is not to make instant accessibility experts of every digital literacy trainer. Rather it is to give them a basic understanding of accessibility problems and solutions, access to information resources and support for specific questions, and a way to manage accessibility issues faced by their patrons and potential patrons. This initiative can be designed to be both effective and efficient, but it will require dedicated funding.

This is consistent with the ALA Comment: "Funds should be dedicated for staff costs that may include, but not be limited to: curriculum development and other preparation time; professional development for library staff; and training for volunteers and part-time staff hired specifically to provide training to the public, whether this training is conducted by library staff or by outside trainers identified by the library. Additional labor costs incurred for programming such as outreach and administration should likewise be eligible for funding."

We recommend that this accessibility initiative should not be a segregated program just for people with disabilities, but fully integrated into the mainstream digital literacy program intended to be housed at libraries and other CAIs. In order for this to work, the Commission should adopt suitable administrative methods in its Digital Literacy Program Administration

that include quantified evaluation of the outreach to, training of, and subsequent adoption and use by people with disabilities. This should begin during the pilot period with a study of underadoption of broadband by consumers with disabilities in order to understand where we are now and how best to stimulate demand and use, with a focus on the needs and capabilities of organizations and institutions that will be doing the training.

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